Christopher R. Culpepper

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OBJECTIVE

A Co-Op position in the field of Computer Engineering for the Spring and Summer of 2016 for the purpose of furthering my education.

EDUCATION

Bachelor of Science, Computer Engineering

Rochester Institute of Technology, Rochester NY, Expected May 2017

Applied Programming Introduction to Software Engineering

Digital Signal Processing Digital System Design

Interface and Digital Electronics Assembly Language Programming

Data Communication and Networks Calculus I-III

COMPETENCIES AND SKILLS

Eagle Scout DOORs

Microsoft Office Maintaining Linux and Windows Systems

Languages & Software:

 \mathbf{C} ARM & HCS12 Assembly

Python AutoIt VHDL Visual Basic for Applications (VBA) **LATEX**

EXPERIENCE

Systems Engineering Co-Op

July 2013 - July 2016

General Dynamics Advanced Information Systems, Pittsfield MA

- Performed software and systems testing on control software.
- Managed requirements and test cases.
- Developed automated testing tracker that was used to status testing progress to management.
- Developed an application to measure and track code base sizes to assist with the peer review process.

Assembly Language Lab Teaching Assistant

January 2015 - Present

Computer Engineering Department, RIT, Rochester, NY

• Responsible for grading student reports and assisting students with ARM assembly language.

PROJECTS

High Altitude Balloon Telemetry Tracker

- Communicates GPS and other sensor data to the Amateur Radio APRS network
- Provides control and tracking for high altitude balloons or other vehicles
- Required PCB design and construction, embedded programming, protocol implementation, RF knowledge

Space Exploration Club High Altitude Balloon Data Logger

- Worked with others to create and build an electronics payload for a high altitude balloon.
- Balloon serves as a testbed for photonic communication for a cube satellite still in development
- Logger able to log position, acceleration, pressure, altitude and temperature
- Required embedded system design, circuit design, power management

Freescale Car Cup Competition

- Worked with partners to create a line-following autonomous vehicles
- Required embedded programming, image processing and control theory

Assembly Language Pong Game

- \bullet Worked with partner to create a 1.5D Pong game for a school project in HCS12 assembly \bullet Required HCS12 assembly, PWM, ADC and digital output

COMMUNITY SERVICE

Adult leader in Boy Scout Troop 88, North Adams, MA

- Assistant Scoutmaster
- Mentored Scouts to achieve rank and acquire valuable life skills
- Assisted with multiple community service projects

Radio communication at multiple road rallies

- Responsible for maintaining communication for racing stages and to central management
- Relayed pertinent information to competitors, stage captain and race officials
- Operated in a high-stress environment to prevent accidents and mistakes

EXTRA-CURRICULAR ACTIVITIES

Amateur Radio Extra

Motorcycle and automobile repair

Member of the K2GXT RIT Amateur Radio Club